

FURTHER REMARKS PRINCIPALLY ON SOME SACCHARICOLOUS FULGOROIDEA [HEM.]

by G.-W. Kirkaldy.

M. Distant's reply (these ANNALES, p. 220), is not satisfactory to me.

1. **Dictyophora pallida** Don. — I am aware that M. Distant refrained *in words* from citing the figures when referring to p. 43 of vol. V of the « Indian Museum Notes » in his synonymy of the above species. These figures are however cited on that page, and as there is no description of the insect there, the figures must be the only basis of identification. Furthermore later notes and descriptions (p. 166 etc.) refer only to *Zamila*.

I maintain therefore that Distant was wrong in citing « Ind. Mus. Notes » at all in the synonymy of *Dictyophora pallida*, as *all the figures and descriptions* in vol. V refer only to *Zamila*.

As M. Distant has the types before him, I shall not refuse him specific determinations. I did not however « *confidently state* » etc. I identified the specimens I had as *Z. aberrans*, at the same time pointing out some discrepancies. The Sinhalese specimens are positively *aberrans*.

The fact that Maxwell-Lefroy (1907, Mem. Agr. India, Ent., I, 240, f. 80) includes these same figures under the heading of « *Dictyophara pallida* » shows how M. Distant's synonymy was regarded by other workers.

2. **Phenice**. — I now agree with M. Distant in this matter, while not accepting his reasoning.

If, as Distant asserts, *Phenice* had been founded in 1845 (T. Linn. S. London), then *fasciolata* (not *fritillaris*) would be the type, as the generic description is based upon *fasciolata*. As a matter of fact, however, *Phenice* was erected in 1841, and as *fritillaris* is the first species mentioned, under Westwood's own declaration it must be the type. The following synonymy is then correct.

PHENICE Westwood 1841 (not 1845 typ.), type *fritillaris*.

Assamia Buckton 1896, type *dentata* (= *moesta*).

Proutista Kirkaldy 1904, type *dentata* (= *moesta*).

Sardis Kirkaldy 1906, type *maculosa* (= *Lumholtzi*).

M. Distant also makes my *P. lumholtzi* a synonym of *P. australis* Distant; while, however, the large mesonotum in *Lumholtzi* is

mostly castaneous, the « metanotum and scutellum » in *australis* are described as greyish-white.

3. **Peregrinus maidis** (Ashmead). In his reply, M. Distant does not mention that Lethierry figured his « *Delphax psylloides* ». This figure is quite recognizable, and, for practical purposes, is exactly like Ashmead's figure of *maidis* and Distant's figure of *simplicia*. While M. Distant's specific mistake is unimportant, there is no excuse for his placing *simplicia* in *Pundaluoya* and *psylloides* in « *Liburnia* », and disregarding *Peregrinus* and *maidis*, except that he had failed to consult the necessary literature.

I have a cotype of *P. maidis* from Florida, and I have examined the species from Ceylon, Java, Fiji, Australia and Hawaii, while M. Van Duzee records it from Jamaica and M. Ballou from Barbados.

M. Distant, in his concluding remarks on p. 222, seems to me to misapprehend some of the problems of geographic distribution. Insects that feed on grasses (or other plants used for fodder or human food) and *oviposit therein* are particularly liable to extraordinary dissemination. *Zea mays*, the principal food-plant of *Peregrinus maidis*, is very widely grown and used for food, fodder and so forth, and the wide dispersal of this hopper, in any stage is easily accomplished. Similarly, a sugarcane pest, *Perkinsiella saccharicida*, is in millions in Java, the Malay States, Australia and the Hawaiian Isles. It is this easy commercial transportation of certain kinds of insects that so obscures their natural distribution.

M. Distant's view of the distribution of *Orthæa vineta* may be correct, for *O. pacifica*, originally described from Fiji, also occurs in Australia and has quite recently slipped into the Hawaiian Isles; it is probably not indigenous in Fiji.

But *Orthæa* is not a particularly easy genus; while the Asiracidae are, *if males are present*, rather easy — though, it is true, laborious — owing to the special development and exposure of the genital hooks, etc. (which are of prime specific importance), whereas these aids are not available, except to a very much less degree, in the Geocoridae. M. Distant's remarks thus lose their point.

4. Among other matters, it may be mentioned that *Arunta* Distant 1907 (as a Derbid) is préoccupied by the same author in 1904 (Cicadidae). As the former is only a synonym of *Phantasmatocera* Kirkaldy 1906, there is no necessity to rename it.

In the « Fauna of British India — Rhynchota », vol. II (p. 154), M. Distant cites *versicolor* as the type of *Aradus*! How a Herrich — Schaefferian species can be the type of a Fabrician genus (except as replacing a preoccupied name), I leave to M. Distant to explain.

The type, of course, is *A. betulæ*, as fixed by Fabricius himself at the inception of the genus.

5. **Sardia** Melichar 1903 = *Hadeodelphax* Kirkaldy 1906 (Fam. Asiracidæ). I unfortunately omitted *Sardia* from my MS Catalogue, and discovered my omission too late.

On p. 115 of Bull. III of the Exp. Sta. H. S. P. A.) line 11 from bottom, « an Issine » should be « a Derbid ».